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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,665	04/11/2002	Sybille Frank	0475-0204P	4705
26813	7590	07/13/2006	EXAMINER	
MUETING, RAASCH & GEBHARDT, P.A. P.O. BOX 581415 MINNEAPOLIS, MN 55458			LOPEZ, CARLOS N	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/049,665	FRANK ET AL.	
	Examiner	Art Unit	
	Carlos Lopez	1731	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-21 and 34-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-21, 34-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-18, 20-21 and 34-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hintersehr (US 5,702,650) in view of Filser et al All Ceramic Dental Bridges, pages 165-189. Hintersehr discloses a method of making dental ceramic prosthesis. Hintersehr teaches of forming a presintered material and then dimensioning through a milling process prior to being densely vitrified (See bridging paragraph of Col. 2-3 and claims 1 and 3 of Hintersehr). Hintersehr is silent disclosing the raw breaking resistance of the pre-sintered material. However, the composition of the presintered material of Hintersehr meets the claimed composition as recited in instant claim 34. Hence, a person of ordinary skill, at the time the invention was made, would reasonably deem the claimed raw breaking resistance as shared mechanical property by Hintersehr.

Hintersehr is also silent in rough and fine milling of the presintered material. However, Filser teaches of rough and fine milling of the presintered material prior to fully sintering the material at a temperature of 1500°C, see pages 168-170. Filser teaches of rough and fine machining prior to sintering allows for easy machining of the presintered material.

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At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have fine and rough milled the presintered blanks of Hintersehr as taught by Filser in order to easily provide a dental prosthesis without the complications of milling a hardened sintered material.

As for claim 20, the machining of the material in and out of contact of the tooth stump would be expected in order to provide a dental prosthesis that properly fits inside the dental patient.

As for claim 35, the direct machining of the enlarged model of the material would require a CAD/CAM software to control the machinery.

As for claim 36, page 173 of Filser notes that a technician can reprocess the fully sintered and machined material to provide its final dimensions.

As for claims 37-39, Filser teaches of pre-sintering the material to 850°C, see page 168.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hintersehr (US 5,702,650) in view of Filser et al All Ceramic Dental Bridges, pages 165-189 and in further view of Filser, All ceramic Dental Bridge slide presentation.

Hintersehr and Filser papers do not disclose the type of machine used for processing the dental prosthesis. However, Filser's slide presentation specifies the type of machine to use for rough and fine milling of the presintered blank. As noted in page 3 subheading "Machining", Filser notes the claimed parameters of the milling machine.

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use the milling machine as noted in Filser's slide to provide the

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means for making a dental prosthesis derived from the combined teachings of Filser and Hintersehr.

Conclusion

The applicant in applicant's copending application 10/468,071 had already cited the newly cited non-patent literature. Applicant is invited under applicant's duty of candor and good faith to provide any other technical information known to applicant concerning the related art, the disclosure, the claimed subject matter, and other factual information pertinent to the instant invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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